Reading: Rosen, Chapter 8 (In 4th edition, chapter 7).


2. Describe an algorithm to decide whether a graph is bipartite.

3. Show that in any simple graph there is a path from any vertex of odd degree to some other vertex of odd degree.

4. For which values of \( m \) and \( n \) does the complete bipartite graph \( K_{m,n} \) have an
   - Euler circuit
   - Euler path.

5. Suppose that a connected bipartite planar simple graph has \( e \) edges and \( v \) vertices. Show that \( e \leq 2v - 4 \) if \( v \geq 3 \).